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09/368,354	08/05/1999	ROBERT R. BUCKLEY	103044	5438

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EXAMINER
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POKRZYWA, JOSEPH R

ART UNIT	PAPER NUMBER
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2622

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16

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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Paper No. 16

Application Number: 09/368,354  
Filing Date: August 05, 1999  
Appellant(s): BUCKLEY ET AL.

*mailed 7/15/03*

\_\_\_\_\_  
George P. Simion  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed April 30, 2003.

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**(1) *Real Party in Interest***

A statement identifying the real party in interest is contained in the brief.

**(2) *Related Appeals and Interferences***

The brief does not contain a statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief. Therefore, it is presumed that there are none. The Board, however, may exercise its discretion to require an explicit statement as to the existence of any related appeals and interferences.

**(3) *Status of Claims***

The statement of the status of the claims contained in the brief is correct.

**(4) *Status of Amendments After Final***

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) *Summary of Invention***

The summary of invention contained in the brief is correct.

**(6) *Issues***

The appellant's statement of the issues in the brief is correct.

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**(7) Grouping of Claims**

Appellant's brief includes a statement that claims 1-4, 10-13 and 19-22 (Group I), claims 5 and 14 (Group II), claims 6, 7, 15 and 16 (Group III), claims 8 and 17 (Group IV), and claims 9 and 18 (Group V), do not stand or fall together and provides reasons as set forth in 37 CFR 1.192(c)(7) and (c)(8).

**(8) Claims Appealed**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(9) Prior Art of Record**

The following is a listing of the prior art of record relied upon in the rejection of claims under appeal.

6,289,364	BORG et al.	09-2001
5,075,787	SHAUGHNESSY et al.	12-1991

**(10) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1-5, 10-14, and 19-22 are rejected under 35 U.S.C. 103(a), as being unpatentable over Borg *et al.* (U.S. Patent Number 6,289,364). This rejection is set forth in prior Office Action, Paper No. 9. The examiner notes that the initial statement in the Final Office Action of Paper No. 9 indicates that claims 1-22 are unpatentable over Borg *et al.* This is a typographical

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error, and it is clear through the body of the rejection of which claims are indeed unpatentable over Borg *et al.*

**Claims 6-9 and 15-18** are rejected under 35 U.S.C. 103(a) as being unpatentable over Borg *et al.* (U.S. Patent Number 6,289,364) in view of Shaughnessy *et al.* (U.S. Patent Number 5,075,787). This rejection is set forth in prior Office Action, Paper No. 9.

**(11) Response to Argument**

In response to applicant's arguments regarding the rejection of **claims 1-4, 10-13, and 19-22 (Group I)**, which states on pages 13 through 14 that Borg fails to teach of generating information that designates the overmarked pixels, as required in claims 1 and 10. Applicant continues to argue through page 15 of four various approaches that the present invention uses for generating information that designates the overmarked pixels, and how in contrast, Borg gives no detail on how pixels in the image data are being designated for processing. The examiner notes the current language in the limitation of claim 1, which states "generating information that designates the overmarked pixels". There is no requirement for teaching the details of how pixels in the image data are to be designated, as argued by applicant. The limitation only requires generating information, wherein this information designates which pixels are overmarked. The fact that Borg gives vague details on the specifics of how pixels in the image data are being designated for processing is irrelevant to what is claimed. Specifically, Borg teaches of generating information that designates the overmarked pixels, being interpreted as the "associated blend information", as read in column 3, lines 57 through 63, as well as "a blend parameter or key 305", as read in column 4, lines 3 through 6. This "associated blend

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information” or “blend parameter or key 305” is information generated that designates which pixels are overmarked, as read in column 1, lines 44 through 52, and column 4, lines 7 through 14, and column 5, lines 14 through 19.

Continuing, in response to applicants arguments regarding the obviousness of Borg in the rejection of **claims 1 and 10**, which states on page 15 that Borg fails to demonstrate clear and particular teaching to motivate one too modify Borg. The examiner notes that no modification is being done to Borg. While Borg does not explicitly state that the combined blended object (seen as 215 in Fig. 2, column 3, lines 57 through 66) is, in fact, included in the same raster image, one of ordinary skill in the art can recognize that the combined blended object can be interpreted as being the same raster image. Further teaching within Borg indicates that the image data and background data, as well as the opacity, are all in a raster format, as read in column 5, line 66 through column 6, line 3. Plus, in column 6, lines 22 through 24, the “blending operations may take place in the RIP’s output buffer”, meaning that the output data would be in accordance to the same raster format. Because of this, one of ordinary skill in the art can view the blending process as obviously being “both the at least one first color and the second color to be included in the overmarked pixels in the same raster image”.

In response to applicant’s arguments regarding the rejection of dependent **claims 5 and 14 (Group II)**, which states on pages 16 and 17 that Borg fails to teach that the modified value of the image data corresponding to the at least one first color results in a reduced amount of marking material corresponding to the at least one first color being applied to a marking substrate, as required in claims 5 and 14. Borg teaches that the modified value of the image data corresponding to the at least one first color results in a reduced amount of marking material

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corresponding to the at least one first color being applied to the overmarked pixels, as seen in column 4, lines 43 through 56 (whereby in a normal blend mode 505, a weighted average of the foreground and background colors is found. With a weighted average, at least one of the colors will result in a reduced amount of marking material corresponding to the at least one first color applied to the substrate. Further, in a lighter blend mode 525, the lighter of the foreground and background colors is selected, thereby resulting in at least one of the colors being a reduced amount of marking material).

In response to applicant's arguments regarding the rejection of dependent **claims 6, 7, 15, and 15 (Group III)**, being unpatentable over Borg *et al.* in view of Shaughnessy *et al.*, which states on pages 17 and 18 that Shaughnessy cannot teach of generating tags that correspond to the overmarked pixels, as required in claims 6 and 15, because various document areas are manually marked, without any pixel specificity. The examiner notes that the manual highlighting procedure of Shaughnessy, which was explained in detail by the applicant, takes place before the generation of information that designates the overmarked pixels, being, in this case, the generation of tags. As interpreted by the examiner, the at least one first color is considered as the image on the original document, while the second color, which is to overmark the first color, is interpreted as the highlighted area. Once a document is highlighted in Shaughnessy's system, the document is input through a scanner, where a processor decides which signals represent highlighted areas and which signals represent unhighlighted areas, as read in column 8, line 50 through column 9, line 10. At this point, the system of Shaughnessy generates tags (interpreted as the linked list of data structures, as read in column 9, lines 42 through 48) that correspond to

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the overmarked pixels, as read in column 8, line 56 through column 9, line 68, and column 13, lines 39 through 48.

Continuing, in response to applicant's arguments regarding the combination of Borg and Shaughnessy, whereby applicant argues on page 18 that since Shaughnessy is directed to manually editing a document for later processing, it would not have been obvious to modify Borg in the manner taught by Shaughnessy. The examiner notes that the manual highlighting portion discussed by applicant is the addition of a second color. The actual processing of the data (generating information, performing image processing, modifying the image data, etc.) is performed by a processor after the document is scanned (see column 8, lines 50 through 62). One of ordinary skill in the art can recognize that the scanned highlighted portion of the document, taught by Shaughnessy, equates to the foreground object taught by Borg. Likewise, the scanned unhighlighted portion of the document of Shaughnessy equates to the background object taught by Borg. Both systems perform various functions on input foreground and background objects by an image processor, making the combination of Borg and Shaughnessy obvious to one of ordinary skill in the art, as both systems share cumulative features, being naturally additive, thereby making any modification to Borg's processor just a simple addition of the software used by Shaughnessy's system. Further, the generated "tag" in Shaughnessy's system effectively stores and indicates the pixel areas that are overmarked, making this a desirable feature for Borg's system.

In response to applicant's arguments regarding the rejection of dependent claims 8 and 17 (Group IV), being unpatentable over Borg *et al.* in view of Shaughnessy *et al.*, which states on page 19 that because Shaughnessy is directed to manually editing a document for later



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processing, Shaughnessy cannot teach of generating tags that correspond to the overmarked pixels, and if the overmarked pixels correspond to one of black text and a black stroke, where the tags indicate that the overmarked pixels are one of black text pixels and black stroke pixels, as required in claims 8 and 17. As discussed above, Borg's system and Shaughnessy's system both perform various functions on input foreground and background objects by an image processor, making the combination of Borg and Shaughnessy obvious to one of ordinary skill in the art. Further, Shaughnessy teaches that the overmarked pixels correspond to one of black text and a black stroke (column 8, line 66 through column 9, line 10, and column 13, lines 39 through 64), where the tags indicate that the overmarked pixels are one of black text pixels and black stroke pixels (column 8, line 66 through column 9, line 48). Therefore, it would have been obvious to a person of ordinary skill in the art to modify Borg's system with the teachings of Shaughnessy, thereby efficiently storing and indicating the overmarked pixel areas.

In response to applicant's arguments regarding the rejection of dependent **claims 9 and 18 (Group V)**, being unpatentable over Borg *et al.* in view of Shaughnessy *et al.*, which states on page 20 that because Shaughnessy is directed to manually editing a document for later processing, Shaughnessy cannot teach of generating information that designates the overmarked pixels comprising performing pattern recognition that recognizes specified patterns, and designating pixels that form the recognized patterns as overmarked pixels, as required in claim 9 and 18. Once again, as discussed above, Borg's system and Shaughnessy's system both perform various functions on input foreground and background objects by an image processor, making the combination of Borg and Shaughnessy obvious to one of ordinary skill in the art. Further, Shaughnessy teaches that designating the overmarked pixels comprising performing pattern

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recognition that recognizes specified patterns, and designating pixels that form the recognized patterns as overmarked pixels (column 9, lines 11 through 48). Therefore, it would have been obvious to a person of ordinary skill in the art to modify Borg's system with the teachings of Shaughnessy, thereby efficiently storing and indicating the overmarked pixel areas.

For the above reasons, it is believed that the rejections should be sustained.

jrp  
July 3, 2003

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Respectfully submitted,

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